



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/493,270	01/28/2000	Kazuyuki Shigeta	35C14208	2020

5514 7590 03/25/2004

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

ABDULSELAM, ABBAS I

ART UNIT	PAPER NUMBER
----------	--------------

2674

DATE MAILED: 03/25/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/493,270

Applicant(s)

SHIGETA, KAZUYUKI

Examiner

Abbas I Abdulsalam

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 4 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12, 13 and 17-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 and 33-39 is/are allowed.
- 6) ☒ Claim(s) 12, 13 and 17-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-9 and 33-39 are allowed.

Response to Arguments

2. Applicant's arguments filed on 01/08/04 have been fully considered but they are not persuasive.

With respect to claims 12-13 and 17-31, applicant argues that that none of the cited references discloses selecting a preferential video according to image characteristics information of the video signals of the systems such that the preferential input signal is subjected to the signal processing by selecting means to maximize image quality. However, as shown in the art rejection below, Sasaki (USPN 6430363) teaches the use of television signals from a plurality of channels and synthesizing means for synthesizing the received television signals from plurality of channels into one screen. See col. 4, lines 37-45. For example, Sasaki illustrates the received video signals as input to the screen synthesizer (30) synthesizing the screens to arrive at synthesized video as shown on Fig 7. Sasaki further discloses the synthesized video as being "reproduced video" (see Fig. 8) from which only the video from the desired channel is retrieved and displayed on a TV monitor (13). See col. 15, lines 8-45, Fig. 5 and Fig (7-8). In addition, Sasaki teaches that in performing a reproducing operation, the screen separator (31) extracts only the portion corresponding to the desired channel before displaying the video on the TV monitor (13). Applicant also argues that the cited references do not teach simultaneous display based on plural signals. However, as shown on the art rejection below, Maeshima et al. (USPN 5389975) teaches three way video inputs video 1, video 2 and video 3 that are provided to the input

Art Unit: 2674

selection switch (1). See col. 2, lines 54-58 and Fig. 2. Sasaki teaches a display means simultaneously displaying a received video signal (col. 2, lines 43-47). It would have been obvious to utilize Maeshima's multiple video inputs in Sasaki's simultaneous display system.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-13 and 17-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naka et al. (USPN 5990968) in view of Maeshima et al. (USPN 5389975) and Sasaki et al. (USPN 6430363).

Regarding claims 12-13 and 17-18 Naka teaches the video signal processing device (18) including input terminals (1, 2), a memory (6), RAM, which provides memory area for processing work of the micro-processor unit, MPU (9), a read out control circuit (8) and a D/A converting circuit (7), which enables the output video signals VO to the display (20) to become a signal subjected to predetermined image processing. Naka teaches that the MPU (9) can obtain data of any position on the screen from memory (6). Naka also teaches that the read out control circuit (8) controls the read-out order of the data from memory (6) and the selection of the read-out data from the memory (6) to read out the data so that an image represented by the data has a form corresponding to an instruction from MPU (9). See col. 5, lines 9-63, col. 6, lines 26-38 and

Art Unit: 2674

Fig 2. In addition, Naka teaches a write control circuit (5) in terms of a loop filter (53) for smoothing the output of a phase comparator (52) to acquire desired response characteristics. See col. 10, lines 32-50, and Fig 6. Naka teaches a communication terminal (16) for inputting the control signal from the external controller (21) into the MPU (9). See col. 16, lines 61-63. Naka teaches the video signal processing device (18) adjusting the video signals (VI) after which the device performs image processing on the video signals (VI), representing any picture which is output from generator (19) and then outputs the video (VO) signals to the display (20). See col. 4, lines 61-67, col. 5, lines 1-5 and Fig 1.

However, Naka does not teach the use of “at least one signal input units to which signals of a plurality of system are inputted”. Maeshima on the other hand teaches three way video inputs video 1, video 2 and video 3 that are provided to the input selection switch (1). See col. 2, lines 54-58 and Fig. 2.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify Naka’s video signal processing system (Fig. 1) to adapt Maeshima’s three way video inputting technique. One would have been motivated in view of the suggestion in Maeshima that the three way video inputting (video 1, video 2, video three) is functionally equivalent to the desired “inputting of plurality of systems”. The use of three way inputting helps function a video information-identifying device more effectively as taught by Maeshima.

Naka does not teach synthesizing video signals of plurality of systems, and a control means selecting a preferential video signal according to image characteristics information of the videos signal of the plurality of systems.

Sasaki on the other hand teaches the use of television signals from a plurality of channels and synthesizing means for synthesizing the received television signals from plurality of channels into one screen. See col. 4, lines 37-45. For example, Sasaki illustrates the received video signals as input to the screen synthesizer (30) synthesizing the screens to arrive at synthesized video as shown on Fig 7. Sasaki further discloses the synthesized video as being “reproduced video” (see Fig. 8) from which only the video from the desired channel is retrieved and displayed on a TV monitor (13). See col. 15, lines 8-45, Fig. 5 and Fig (7-8).

Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify Naka’s video signal processing device to include Sasaki’s synthesizing means and technique of video signal selection as shown in Fig. 7 and Fig 8 respectively. One would have been motivated in view of the suggestion in Sasaki that the synthesizing means and video signal selection technique equivalently perform the desired functions of synthesizing video signals and selecting a preferential video signal respectively. The use of synthesizing means and video selection technique helps function a video signal recording apparatus more effectively as taught by Sasaki et al.

Regarding claims 19-20 and 25, Naka teaches a signal as an input from the video signal generator (19) into the video inputting device (18) where the optimum adjustment amount obtained is stored in the non-volatile memory (22) for every video signal. See col. 11, lines 55-67.

Regarding claims 21-23, Naka teaches timing charts showing the variation of sampling data with sampling clock phase. See Fig 3(A-E).

Art Unit: 2674

Regarding claims 24 and 26, Naka teaches the video signal-processing device (18) with respect to signals with improved resolution. See col. 17, lines 13-22.

Regarding claim 27, Naka teaches a video signal generator (19) inputting video signals with a test pattern of having two gradation levels, 0% brightness (black signal) and 100 % brightness (white signal).

4. Applicant's arguments with respect to claims 28-31 have been considered but are moot in view of the new ground(s) of rejection.

Claims 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naka et al. (USPN 5990968) in view of Maeshima et al. (USPN 5389975) Sasaki et al. (USPN 6430363) and Ito et al. (USPN 6483249).

With respect to claim 28, in addition to has been described, Naka teaches that by controlling the write-in control circuit (5) with the phase control signal CKPH, the phase of the sampling clocks can be adjusted in order to ultimately achieve picture elements that maintain the image quality. See col.11, lines 27-38. Naka also teaches an output terminal (12, 17), and a communication terminal (16) for inputting the control signal in terms of phase adjustment. See col. 5, lines 48-62. However, Naka does not teach “means for outputting a request for setting or resetting input image signals to signal sources for inputting signals to the plurality of input system. Ito on the other hand teaches as shown in Fig. 21, input/output characteristics curve that can be changed and manipulated. Ito also teaches as shown in Fig. 20a a display pulse generator (55), a pulse counter (56) along with look-up table setting and resetting input image data.

Art Unit: 2674

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Naka's video processing to incorporate Ito's gradation display process (Fig. 20A-20B), and input/output characteristics of the look-up table (57) (Fig. 21) for the purpose of inquiring input image signals with respect to setting, resetting as well as characterizing the signals. The use of input/output characteristics helps function a signal processing circuit as taught by Ito.

Regarding claims 29-31, Naka teaches a video signal processing device adjusting the sampling clocks by determining a correction direction of the phase of a sampling clocks through means of calculations. See col. 2, lines 40-65. Moreover, Sasaki teaches a system controller (16) setting the tuner (2) to respective channels (Fig. 6) in accordance with information supplied from the timer (17) such that the electric waves for a given channel are selected from the electric waves received by antenna (1), and the demodulator (3) demodulates the received waves into signals. See col. 6, lines 35-47.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2674

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. The prior art made of record and not relied upon is considered to applicant's disclosure.

The following arts are cited for further reference.

U.S. Pat. No. 5,398,078 to Masuda et al.

U.S. Pat. No. 5,298,905 to Dahl

7. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Abbas Abduselam** whose telephone number is **(703) 305-8591**. The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached at **(703) 305-4709**.

Any response to this action should be mailed to:

Commissioner of patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Art Unit: 2674

Hand delivered responses should be brought to Crystal Park II, Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology center 2600 customer Service office whose telephone number is (703) 306-0377.

Abbas Abdulsalam

Examiner

Art Unit 2674

March 18, 2004


XIAO WU
PRIMARY EXAMINER